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| (54) | Title: METHOD OF CARRYING OUT CHEMICAL REACTIONS IN A MICROREACTOR AND SUCH A MICROREACTOR |
| (57) | Abstract |

Microreactors are distinguished in particular by a high selectivity and yield of the chemical reactions carried out therein. The high surface-to-volume ratio however results in high heat losses from the reaction region to the surrounding area even in counter-flow guidance of the educt and product streams whereby those microreactors are limitedly suitable for use for chemical reactions at high temperatures. The object of minimising such heat losses is attained with a method in which the educt and product streams are guided spirally or radially respectively to and from the reaction region (4) disposed in a central region (4) of the microreactor (1). The reaction region is therefore surrounded in at least one plane by the educt and product streams which are guided in counterflow relationship with each other, so that the reaction heat generated is for a large part fed to the reaction region again. As a result the area of use of microreactors is decisively expanded with regard to reactions at high temperatures. A corresponding reactor in different configurations is also described.